Australian Bureau of Statistics

# 1350.0 - Australian Economic Indicators, Sep 2001

ARCHIVED ISSUE Released at 11:30 AM (CANBERRA TIME) 31/08/2001

## Special Article - Internet Activity Australia

## INTRODUCTION

At the end of the March Quarter 2001 there were 665 Internet Service Providers (ISPs) in Australia. They provided Internet access to a total of 3,968,000 subscribers who downloaded 1,040 million megabytes of data during the Quarter. This information was collected from the Internet Activity Survey (IAS) - an Australian Bureau of Statistics (ABS) survey which measures Internet connection activity.

The Internet Activity Survey has been conducted quarterly since the September quarter 2000, and the results are published in **Internet Activity** (Cat. no. 8153.0). The collection is a census of all Australian-based ISPs operating during the reference period. ISPs are defined as businesses that supply Internet connectivity services to individuals, households, businesses and other organisations. Data collected include: size and structure of the ISP industry, characteristics and location of ISP customers, their Internet usage and the nature of related telecommunications infrastructure.

Broad level statistics produced from the survey include:

- number and size of ISPs - number of business and private Internet subscribers,
- number and types of accounts offered by ISPs,
- the volume of traffic through ISPs to Internet subscribers, and
- the number of lines providing Internet connectivity to subscribers and the type of access provided.

Most of these data items are available at a regional level. This article discusses the background to the survey and some findings from the first three quarters of data.

### INDUSTRY BACKGROUND: WHY SURVEY INTERNET SERVICE PROVIDERS?

Internet Service Provision is one of a number of new Information, Communication and Technology (ICT) industries which have arisen in recent years. Internet Service Providers (ISPs) are the main avenue[1] of Internet access for Australian businesses, households and government. There is a strong policy need for statistics on the ISP component of the Telecommunications industry in Australia and how it is evolving over time. There is also interest in the characteristics and location of Internet subscribers, and the nature of related Internet service infrastructure. The ISP industry itself also seeks information to better understand the structure of the industry and to provide reliable benchmarking measures. Results of the survey are released three months after the end of each reference period, thus ensuring that data collected are timely and reflect changes and developments in the ISP industry.

## RESULTS AND FINDINGS

Table 1 shows that the number of ISPs has declined over the six months since 30 September 2000. This is despite a number of new ISPs entering the market. There were 718 ISPs operating at the end of the September quarter 2000. Despite 23 new ISPs commencing during the December Quarter, there were also 45 ISPs that either closed down or ceased to provide ISP services leaving a net decrease over the quarter of 22 (3.1%). Similarly for the March quarter 2001, 32 new ISPs commenced with 63 cessations, a net decrease of 31 (4.5%) leaving 665 operators. Most of the decrease has been in the small (101 to 1000 subscribers) category over the three quarters, with all other categories remaining fairly stable.

**TABLE 1. INTERNET ACTIVITY SUMMARY, AUSTRALIA(a)**

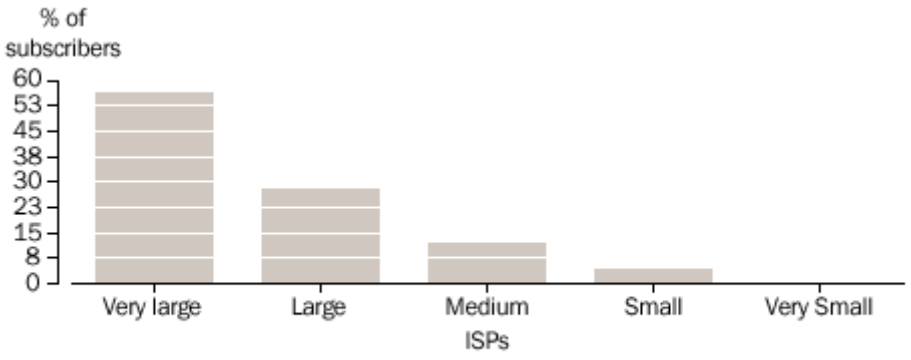
| | September Quarter 2000 | December Quarter 2000 | March Quarter 2001 |
|---|---|---|---|
| **ISPs (no.)** | | | |
| Very small (1-100 subscribers)(b) | 132 | 129 | 129 |
| Small (101-1000 subscribers) | 377 | 359 | 330 |
| Medium (1001-10,000 subscribers) | 173 | 171 | 169 |
| Large (10,001-100,000 subscribers) | 28 | 31 | 31 |
| Very large (100,001+ subscribers) | 8 | 6 | 6 |
| Total | 718 | 696 | 665 |
| **INTERNET ACCESS (no.)** | | | |
| Points of Presence (c) | 2,244 | 2,394 | 2,310 |
| Access lines (d) | 521,645 | 515,740 | 490,108 |
| **SUBSCRIBERS ('000)(b)** | | | |
| Business and government | 432 | 512 | 482 |
| Household | 3,417 | 3,410 | 3,486 |
| Total | 3,849 | 3,921 | 3,968 |
| **DATA DOWNLOADED (million Mbs)** | | | |
| Business and government subscribers | 457 | 467 | 428 |
| Household subscribers | 595 | 583 | 611 |
| Total | 1,052 | 1,050 | 1,040 |
| **WEB SITES HOSTED (no.)** | | | |
| Business and government | 101,235 | 97,165 | 88,722 |
| Business and government with secure transaction capabilities | 3,710 | 4,233 | 3,966 |

(a) The source of the IAS population frame is the Telecommunications Industry Ombudsman (TIO) with which ISPs are required to register. The TIO list is supplemented where necessary with ISPs identified from other sources such as industry association membership lists and industry media.
(b) For the purposes of the IAS, a subscriber is defined as a customer who has accessed or paid for access to the Internet in the last 90 days. Included are paying and non paying customers, email only subscribers, dial-up subscribers and those with permanent connections. Excluded are customers who purchase other services from an ISP, such as Web hosting, but do not obtain Internet
access.
(c) A Point of Presence (POP) is a geographical location where a subscriber can access (connect to) an ISP via access lines.
(d) Lines, points, ports, modem access points, available to subscribers to access their ISP

The ISP industry is clearly a dynamic industry and it is possible that seasonality may exist in the quarterly data. However, the time series is far too short to confirm whether there is a seasonal pattern, or to make any seasonal adjustment.

Very large ISPs provided Internet access for 56% of all subscribers at the end of the March quarter. This compares with 28%, 12%, 4% and 0.1% respectively for Large, Medium, Small and Very small ISPs.

**PROPORTION OF SUBSCRIBERS BY ISP SIZE - MARCH 2001**




*Source: ABS (Cat. no.8153.0).*

Whilst there has been a continuing increase in total subscriber numbers, there have been some movements in the make up of those subscribers, as shown in Table 2. The most noticeable trend in subscriber numbers is the decrease in free subscribers. Although there have been significant decreases in free subscribers each quarter, this has been compensated for by the growth in paid subscriber numbers, resulting in an overall increase in total subscribers.

**TABLE 2: INTERNET ACCESS PLANS**

| | September Quarter 2000 | December Quarter 2000 | March Quarter 2001 |
|---|---|---|---|
| SUBSCRIBERS ('000) | | | |
| Free access | 685 | 377 | 254 |
| Monthly/Quarterly/Annual access | 2,447 | 2,595 | 2,717 |
| Hourly access | 589 | 841 | 891 |
| Volume access | (a) | 39 | np |
| Other access | 129 | 68 | np |
| All access plans | 3,849 | 3,921 | 3,968 |

(a) Volume access and Other access were not collected separately in September quarter.
np not available for publication but included in total where applicable unless otherwise indicated.

There were 1,040 million megabytes (Mbs) of data downloaded by subscribers during the March quarter 2001. This level has remained stable over the three quarters of the survey (1,052 in September 2000 and 1,050 in December 2000). During the March quarter 2001, household subscribers downloaded 611 million Mbs of data (59% of the total) while business and government subscribers downloaded 428 million Mbs. There was an overall average of 262 Mbs of data downloaded per Internet subscriber, with household subscribers averaging 175 Mbs of data downloaded, and business and government subscribers averaging 888 Mbs.

**TABLE 3. STATE AND TERRITORY SUMMARY**

| Quarter | ISPs no. | POPs no. | Access lines no. | All subscribers '000 | Data downloaded by subscribers millions Mb |
|---|---|---|---|---|---|
| **NEW SOUTH WALES** | | | | | |
| September 2000 | 299 | 738 | 176,078 | 1,301 | 336 |
| December 2000 | 291 | 804 | 187,150 | 1,318 | 309 |
| March 2001 | 283 | 781 | 157,253 | 1,284 | 337 |
| **VICTORIA** | | | | | |
| September 2000 | 267 | 505 | 148,583 | 1,020 | 327 |
| December 2000 | 264 | 548 | 134,710 | 1,085 | 333 |
| March 2001 | 248 | 500 | 137,465 | 1,047 | 250 |
| **QUEENSLAND** | | | | | |
| September 2000 | 177 | 427 | 96,035 | 771 | 181 |
| December 2000 | 176 | 438 | 101,629 | 752 | 174 |
| March 2001 | 170 | 437 | 99,235 | 803 | 201 |
| **SOUTH AUSTRALIA** | | | | | |
| September 2000 | 78 | 176 | 28,324 | 246 | 59 |
| December 2000 | 78 | 185 | 31,462 | 254 | 84 |
| March 2001 | 73 | 186 | 31,668 | 278 | 88 |
| **WESTERN AUSTRALIA** | | | | | |
| September 2000 | 113 | 233 | 47,891 | 318 | 99 |
| December 2000 | 120 | 255 | 37,860 | 318 | 101 |
| March 2001 | 109 | 239 | 40,861 | 357 | 113 |
| **TASMANIA** | | | | | |
| September 2000 | 30 | 66 | 8,458 | 76 | 14 |
| December 2000 | 33 | 72 | 10,627 | 83 | 16 |
| March 2001 | 32 | 73 | 10,793 | 88 | 17 |
| **NORTHERN TERRITORY** | | | | | |
| September 2000 | 17 | 30 | 3,183 | 30 | 8 |

| | | | | | |
|---|---|---|---|---|---|
| December 2000 | 18 | 30 | 4,095 | 36 | 9 |
| March 2001 | 20 | 32 | 4,523 | 38 | 9 |
| AUSTRALIAN CAPITAL TERRITORY | | | | | |
| September 2000 | 58 | 69 | 13,093 | 86 | 27 |
| December 2000 | 56 | 62 | 8,207 | 74 | 24 |
| March 2001 | 57 | 62 | 8,310 | 73 | 24 |
| TOTAL AUSTRALIA | | | | | |
| September 2000 | 718 | 2,244 | 521,645 | 3,849 | 1,052 |
| December 2000 | 696 | 2,394 | 515,740 | 3,921 | 1,050 |
| March 2001 | 665 | 2,310 | 490,108 | 3,968 | 1,040 |

**Regional Results**

Table 3 shows a breakdown of ISPs by State and Territory. From the December quarter 2000 to the March quarter 2001, the following changes occurred at a regional level:

- New South Wales-ISPs decreased by 8, Points of Presence (POPs) decreased by 23, access lines decreased by 29,897, subscribers decreased by 34,000 and data downloaded by subscribers increased by 28 million Mbs.
- Victoria-ISPs decreased by 16, POPs decreased by 48, access lines increased by 2,755, subscribers decreased by 38,000 and data downloaded by subscribers decreased by 83 million Mbs.
- Queensland-ISPs decreased by 6, POPs decreased by 1, access lines decreased by 2,394, subscribers increased by 51,000 and data downloaded by subscribers increased by 27 million Mbs.
- South Australia-ISPs decreased by 5, POPs increased by 1, access lines increased by 206, subscribers increased by 24,000 and data downloaded by subscribers increased by 4 million Mbs.
- Western Australia-ISPs decreased by 11, POPs decreased by 16, access lines increased by 3,001, subscribers increased by 39,000 and data downloaded by subscribers increased by 12 million Mbs.
- Tasmania-ISPs decreased by 1, POPs increased by 1, access lines increased by 166, subscribers increased by 5,000 and data downloaded by subscribers increased by 1 million Mbs.
- Northern Territory-ISPs increased by 2, POPs increased by 2, access lines increased by 428, subscribers increased by 2,000 and data downloaded by subscribers remained constant at 9 million Mbs.
- Australia Capital Territory-ISPs increased by 1, POPs remained constant at 62, access lines increased by 103, subscribers decreased by 1,000 and data downloaded by subscribers remained constant at 24 million Mbs.

One strength of the Internet Activity Survey is its ability to provide data below State level. Data are produced at Statistical Divisions and ARIA$^2$ levels according to the location of the POP (Tables 5.1 and 5.2 in the publication). For example, in the March quarter nearly all subscribers accessed a POP located in either highly accessible (89%) or accessible (8%) regions in Australia. Only 1% (49,000) of subscribers accessed a POP in very remote or remote regions and 2% (84,000) in moderately accessible regions. The number of subscribers per access line in highly accessible regions was 8.1, in accessible regions 8.2, moderately accessible regions 8.8, remote regions 9.3 and very remote regions 7.5.

## Access Technologies

Internet access technology is rapidly changing with a vast range of technologies available to access the Internet including: analog, digital, satellite, Wireless Applications Protocol (WAP), and microwave. There is keen policy interest in the growth of broadband technologies such as Cable and Digital Subscriber Line (DSL). The survey shows that from September quarter 2000 to March quarter 2001, DSL subscribers increased from 6,000 to 27,000.

## ABS CONTACT

Further information on the Internet Activity Survey can be obtained by contacting Dean Bloom on Brisbane 07 3222 6404 or email dean.bloom@abs.gov.au Information on all ABS activities in the field of information technology statistics is available from the Information Technology Statistics theme page on the ABS web site (www.abs.gov.au). Select themes from the homepage menu.

## FOOTNOTES

1 Libraries, Internet kiosks and Internet cafes which provide Internet access on a casual basis are excluded from the survey.

2 Accessibility/Remoteness Index of Australia (ARIA) defines remoteness in terms of accessibility to defined service centres. Localities which are remote have less access to service centres and conversely, those which are less remote have greater access to service centres.

---

This page last updated 8 December 2006